

## **Amendments to the Claims**

Please amend claims 1-13 and add new claim 14 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

- 1    1. (currently amended) Demodulator arranged to demodulate a first signal  
2    with the aid of a second signal, the demodulator comprising:
  - 3                 a first bandpass ~~(30)~~ filter arranged to recover the first signal ~~(36)~~  
4                 from a received signal ~~(10)~~; and
    - 5                         a second bandpass filter ~~(32)~~ arranged to recover the second signal  
6                         ~~(36)~~ from a received signal ~~(10)~~;
      - 7                                 in which the passband of the second bandpass filter ~~(32)~~ is  
8                                 substantially narrower than the passband of the first bandpass filter ~~(30)~~.
  - 1    2. (currently amended) Demodulator according to claim 1, wherein the  
2    demodulator comprises compensation means ~~(40,50)~~ for compensating phase error  
3    between the recovered first ~~(36)~~ and second ~~(38)~~ signals.
  - 1    3. (currently amended) Demodulator according to claim 2, wherein the  
2    compensation means comprises a delay element ~~(4)~~ that is arranged to delay the  
3    recovered first signal ~~(36)~~.
  - 1    4. (currently amended) Demodulator according to claim 2, wherein the  
2    compensation means comprises a phase shifter ~~(50)~~ that is arranged to shift a  
3    phase of the recovered first signal ~~(36)~~, the phase shift being dependent upon the  
4    phase difference between the recovered second signal ~~(38)~~ and a reference signal  
5    ~~(51)~~.
  - 1    5. (currently amended) Demodulator according to claim 4, wherein the  
2    compensation means comprises a selector ~~(31)~~ that is arranged to select the  
3    reference signal ~~(51)~~ from at least two sources.

1       6. (currently amended) Demodulator according to claim 5, wherein the  
2       selector (31) is a programmable selector.

1       7. (currently amended) Demodulator according to claim 5, wherein one of the  
2       at least two sources is a demodulated first signal (18).

1       8. (currently amended) Demodulator according to claim 5, wherein one of the  
2       at least two source is an image of a demodulated first signal (18) which is stored  
3       in memory means (35).

1       9. (currently amended) Demodulator according to claim 8 wherein, the  
2       memory means (35) comprises an analogue to digital converter arranged to  
3       provide a digital image of the demodulated first signal.

1       10. (currently amended) Demodulator according to claim 1 wherein the  
2       demodulator further comprises a phase locked loop (60) for stabilizing the  
3       recovered second signal (38).

1       11. (currently amended) Demodulator according to claim 1 wherein the  
2       recovered second signal (38) is used for frequency down converting at least a third  
3       signal (73).

1       12. (currently amended) Apparatus (88) comprising a demodulator (82), the  
2       demodulator being arranged to demodulate a first signal (36) with the aid of a  
3       second signal (38), the demodulator comprising:

4                  a first bandpass filter (30) arranged to recover the first signal (36)  
5       from a received signal (10); and

6                  a second bandpass filter (32) arranged to recover the second signal  
7       (38) from the received signal (10);

8                  in which the passband of the second bandpass filter (32) is  
9       substantially narrower than the passband of the first bandpass filter (30).

1       13. (currently amended) Method for demodulating a first signal with the aid of  
2       a second signal the method comprising the steps of:

3                 using a first bandpass filter (30) for recovering the first signal (36)  
4       from a received signal (40);

5                 using a second bandpass filter (32) having a substantially narrower  
6       passband than the first bandpass filter (30), for recovering the second signal (38)  
7       from the received signal (40).

1       14. (new) Demodulator according to claim 1 further comprising a mixer  
2       connected to the first and second bandpass filters to mix the first signal and the  
3       second signal.